PCS Clinical Audit Tool – User Guide

Version 3.3.1

APPENDICES G

COMMUNICARE DATA MAPPINGS

PEN COMPUTER SYSTEMS

HEALTH INFORMATICS 17 1993 - 2009

Microsoft CERTIFIED Partner

Company Contacts

Sydney (Head Office)

Pen Computer Systems
Level 6, The Barrington
10-14 Smith St
PARRAMATTA NSW 2150

Phone: +61 2 9635 8955
Fax: +61 2 9635 8966
Email: enquiries@pencs.com.au
Web: www.pencs.com.au

Melbourne Office

Pen Computer Systems
Level 5
434 St Kilda Rd
MELBOURNE VIC 3004

Phone: +61 3 9866 8477
Fax: +61 3 9866 5699

Document Contact

Contact: **Christine Chidgey**

Phone: +61 3 9866 8477

Email: christine.chidgey@pencs.com.au

Document Control

Version	Date	Modified By	Description
2.11	31/05/2011	Christine Chidgey	Initial Document
2.12	30/06/2011	Paul Lopez	Updated Mappings
2.13	18/11/2011	Steve White	Updated Mappings and descriptions
2.14	12/12/2011	Steve White	Replaced medication mappings
2.15	15/02/2012	Nigel Patmore	Updated mappings, improved explanations
3.3	14/03/2012	Christine Chidgey	Review and minor updates
3.3.1	20/03/2012	Christine Chidgey	Add Reference Appendix

Contents

COMPANY CONTACTS 2
Sydney (Head Office) *2*
Melbourne Office *2*
DOCUMENT CONTACT 2
DOCUMENT CONTROL 3

CONTENTS 4

INTRODUCTION 5

CLINICAL AUDIT TOOL (CAT) 5
USER GUIDE 5
IMPLEMENTED FUNCTIONALITY 6
DEFINITIONS 6
Activity *6*
Status *6*

APPENDIX G – COMMUNICARE DATA MAPPINGS 7

APPENDIX G-1 – GENERAL 7
APPENDIX G-2 – PROCEDURES 8
APPENDIX G-3 – MEASUREMENTS 9
Pathology Results *9*
APPENDIX G-4 – CONDITIONS 11
Pregnancy *18*
APPENDIX G-5 – MEDICATIONS 19
APPENDIX G-6 – IMMUNISATIONS 29
APPENDIX G-7 – ASSIGNED PROVIDERS 30

REFERENCE APPENDIX: COMMUNICARE CUSTOM FIELDS MAPPING 31

MAPPING TO SYSTEM CODES 31

INTRODUCTION

Clinical Audit Tool (CAT)

The Clinical Audit Tool (CAT) analyses clinical information from GP Clinical Desktop Systems. It translates data into real statistical and graphical information that is easy to understand and action. This allows practitioners to assess and improve the quality and completeness of patient information. The benefit to the practice is to assist with its ongoing accreditation and provide opportunities to grow practice income. The emphasis of the tool is to help practice staff to take specific action to improve patient coverage in chronic disease management and prevention.

User Guide

The purpose of the User Guide is to provide instructions on how to install and use the functionality provided by the CAT.

The User Guide is split into 2 parts:
Part 1: Installation and Configuration including how to collect data sets
Part 2: Functionality

The Appendices for each Clinical Desktop System's Data Mappings are provided separately.

This full User Guide is available from
http://help.pencs.com.au/cat.htm

The Appendices contained in this document are for the Communicare clinical system.

Implemented Functionality

Patient data is exported according to version 1.10 of the Pen Computer Systems Clinical Audit Tool specification. However, the following features are yet to be implemented:

- Colorectal screening
- FOBT test
- Antibiotics Systemic
- Antithrombotics > Anticoagulants
- Antithrombotics > Antiplatelets
- Anticoagulants > Dabigatran
- Lipid Modifying > Fibrates
- Gestational Diabetes
- Left Ventricular Hypertrophy
- Glucose 2H Tolerance Test
- Patient Smoking Quit Date
- Alternate MBS items for 715, 721 and 723
- Birth ethnicity
- Health Fund name and number
- Sexuality field

Definitions

Activity

A patient is considered 'active' if there are three contact services (excluding No Client Contact services) provided in the previous two years by any provider (i.e. there is no requirement for a Provider Number).

Status

The Communicare current patient status is submitted as a patient's 'status'.

- C=Current Patient
- T=Transient Patient
- B=Banned
- P=Past Patient
- F=Fictitious (not exported)
- N=Non Patient (not exported)
- Null=Deceased (not exported)

APPENDIX G – COMMUNICARE DATA MAPPINGS

APPENDIX G-1 – GENERAL

CAT Field	Communicare Equivalent
Gender	Patient Biographics – Sex
Ethnicity	Patient Biographics – Aboriginality
DVA	Patient Biographics – DVA
Age	Patient Biographics – Date of Birth
Email	Patient Biographics – Email
Last Visit	Service Recording, Client contacts only
Postcode	Patient Biographics – Locality Postcode
Status	Patient Biographics – Patient Status at time of extract

CAT Allergy Value	Communicare Equivalent
Allergy Recorded	At least one record in Adverse Reaction Summary
No Known Allergies	Nil Known box checked on Adverse Reaction Summary
Nothing Recorded	No records and Nil Known box is unchecked on Adverse Reaction Summary

Smoking Status

The most recent Communicare qualifier with a system code of 'SMO' or 'SMP' (normally Smoking Status & Smoking During Pregnancy) is used for the Smoking Status field.

CAT Smoking Status	System Code of Qualifier Result
Smoker	S
Ex-smoker	E
Non-smoker	N

Alcohol Status

The most recent Communicare qualifier with a system code of 'ALC' or 'ALP' (normally Alcohol Consumption Level & Alcohol Consumption During Pregnancy) is used for the Alcohol Status field.

CAT Alcohol Status	System Code of Qualifier Result
Drinker	D
Non-drinker	N
Not recorded	-

Alcohol Consumption Frequency

The most recent Communicare qualifier with an export code of 'ALC-FRQ' (normally Alcohol Audit Interview Q1) is used for the Alcohol Consumption Frequency field.

CAT Value	Communicare Export Code of Qualifier Result
Never in my life	N
1 day per month	M1
2 to 3 days per month	M3
3 to 4 days per week	W4
Every day	D

Alcohol Consumption Amount

The most recent Communicare qualifier with an export code of 'ALC-AMT' (normally Alcohol Audit Interview Q1) is used for the Alcohol Consumption Amount field.

CAT Value	Communicare Export Code of Qualifier Result
2	2
4	4
6	6
9	9
10	10

APPENDIX G-2 – PROCEDURES

CAT Procedure	Communicare Equivalent
Eye Exam	Clinical item with ICPC code of **F30** or **F31**, and any term
Foot Exam	Clinical item with ICPC code of **L41** and any term
Spirometry	Clinical item with ICPC code of **R39** and term code of **004**
MMSE	Clinical item with ICPC code of **P43** and term code of **004**
Breast Screen	Clinical item with export code of **BREAST**
Pap Smear	Clinical item with export code of **PAPSMEAR**

APPENDIX G-3 – MEASUREMENTS

The most recent qualifier is used for each each CAT measurement. The value of the qualifier and the date it was recorded is exported to CAT. Some measurements have an additional flag for service incentive payments. This flag is set if the particular measurement has been recorded in the previous six months and the previous six months before that.

Pathology Results

Pathology Results must be received in atomised HL7 format in order for the results to be picked up by Communicare and processed automatically into qualifiers. 'Atomised' format means that the HL7 results contain the data in predefined coded segments. The test name and LOINC (Logical Observation Identifiers Names & Codes) code are the important bits of data the extraction tool looks for.

If an investigation request is matched to a result which is known to have certain qualifiers associated with it, these qualifiers will be linked through to the investigation result. This allows qualifiers that were automatically imported (via LOINC codes) to be reviewed while reviewing the result itself.

Numeric and true/false qualifiers are supported. Numeric qualifiers receive the numeric value coded by the laboratory in the result. True/false qualifiers receive the 'Abnormal' flag coded by the laboratory in the result. This means that the qualifier will record whether the lab declared the result to be abnormal, not the actual text returned by the lab.

CAT Measurement	Communicare Qualifier
Waist	"Waist Circumference" or any qualifier with system code **WCM**
Cholesterol	"Total Cholesterol Level" or any qualifier with system code **CHO**
HDL	"HDL level" or any qualifier with system code **HDL**
LDL	"LDL Level" or any qualifier with system code **LDL**
Triglycerides	"Triglyceride Level" or any qualifier with system code **TRG**
Creatinine	"Creatinine" or any qualifier with system code **CRU**
Urinary creatinine	"Urinary creatinine " or any qualifier with LOINC code **14683-7**
Microalbumin	"Albumin" or any qualifier with system code **ALB**
ACR (Microalbumin Creatinine Ratio)	"ACR (Alb/Creat Ratio)" or any qualifier with system code **ACR**
HbA1c	"HbA1c" or any qualifier with system code **HBA**
BP - Systolic	"BP - Systolic blood pressure" or any qualifier with system code **BPS**
BP - Diastolic	"BP - Diastolic blood pressure" or any qualifier with system code **BPD**
HbA1c	"HbA1c" or any qualifier with system code **HBA**
INR	"INR (International Normalised Ratio)" or any qualifier with system code **INR**
Random Blood Glucose	"Blood glucose level - random" or any qualifier with system code **BGR**
Fasting Blood Glucose	"Blood glucose level - fasting" or any qualifier with system code **BGF**
Height	"Height" or any qualifier with system code **HCM**
Weight	"Weight" or any qualifier with system code **WKG**
Birth Weight	Birth Weight from patient biographics. If this is not recorded, uses qualifier with system code **WGK**) recorded on day of birth.

BMI	"BMI" or any qualifier with system code **BMI**
Haemoglobin	"Haemoglobin" or any qualifier with system code **HBH**
Protein Creatinine Ratio	"PCR (Protein/Creatinine Ratio)" or any qualifier with system code **PCR**
Chlamydia Test	"Chlamydia result abnormal" or any qualifier with system code **XCL**
HIV Test	"HIV result abnormal" or any qualifier with system code **XHI**
Gonorrhoea Test	"Gonorrhoea result abnormal" or any qualifier with system code **XGN**
Syphilis Test	"Syphilis result abnormal" or any qualifier with system code **XSY**
Eye Exam	"Eye Exam" or any qualifier with export code of **EYEEXAM**
Foot Exam	"Foot Exam" or any qualifier with export code of **FOOTEXAM**
Pap Smear	"PAP smear done" or any qualifier with export code of **PAPSMEAR** OR Any clinical item with the export code of **PAPSMEAR** OR Any investigation request with description of **PAP SMEAR**

APPENDIX G-4 – CONDITIONS

The data collection process collects conditions that are found on the clinical record screen. Chronic conditions are flagged as true for a patient if the condition recorded in the patient's clinical record.

Conditions are mapped using ICPC Code and ICPC Term Code to determine if a condition is to be included.

CAUTION: This list of ICPC codes needs to be reviewed after each release of ICPC2-Plus to include new codes.

CAT Category	Communicare Mapping – ICPC Code
Diabetes	
Type II	T90 002 Diabetes mellitus T90 005 Non insulin dependant diabetes T90 007 Adult onset diabetes T90 009 Type 2 diabetes T90 016 Type 2 diabetes treated with insulin
Type I	T89 001 Insulin dependant diabetes T89 002 Type 1 diabetes T89 003 Juvenile onset diabetes T89 004 Complicated diabetes T89 005 Diabetic coma T89 006 Diabetic hyperglycaemia
Undefined Diabetic	T99 011 Diabetes insipidus

Respiratory	
Asthma	R96 001 Asthma R96 002 Broncial Asthma R96 005 Status Asthmaticus R96 007 Wheezy Bronchitis
COPD	R95 001 Chronic Obstructive Airway Disease R95 002 Chronic Obstructive Pulmonary Disease R95 008 Chronic airways limitation R79 003 Chronic bronchitis

Cardiovascular	
CHD	K41 005 Angiography; coronary K53 003 Angioplasty; artery; coronary K53 009 Stent(s); coronary K54 007 Graft; coronary Artery Bypass K74 001 Angina Pectoris K74 002 Pain; angina K74 003 Spasm; artery; coronary K74 004 Angina; unstable K74 006 Insufficiency; coronary K74 007 IHD with Angina K75 002 Infarction; myocardial; acute K75 004 Occlusion; coronary K75 013 Infarction; myocardial K75 014 Heart Attack K76 003 Coronary Artery Disease K76 005 Disease; atherosclerotic; heart K76 011 Disease; ischaem Heart; subacut K76 013 Coronary Heart Disease K76 014 Disease; ischaemic Heart K76 015 Disease; ischaem Heart; chronic K76 018 IHD Without Angina K84 009 Disease; heart
Acute Coronary Syndrome	K74 006 Insufficiency;coronary K74 001 Angina pectoris K74 004 Angina;unstable
Myocardial Infarction	K75 002 Infarction; myocardial; acute K75 013 Infarction; myocardial
Hypertension	K85 001 Elevated Blood Pressure K85 004 High Blood Pressure K85 007 Raised Blood Pressure K86 001 Hypertension; essential K86 004 Hypertension; uncomplicated K86 005 Hypertension K85 008 Hypertension; labile K87 002 Hypertension;renal disease K87 001 Hypertension;heart disease K87 003 Hypertension;nephropathy K87 004 Hypertension;malignant K87 005 Hypertension;LV hypertrophy K87 006 Hypertension;cardiorenal K87 007 Hypertensive encephalopathy K87 010 Hypertension;complicated K87 011 Hypertension;secondary

Heart Failure	K77 001 Oedema; pulmonary; acute K77 002 Failure; congestive Cardiac K77 004 Failure; cardiac K77 008 Failure; ventricular; left K77 011 Failure; heart K77 013 Oedema; pulmonary K77 014 Failure; ventricular; right K82 003 Cor Pulmonale
Stroke	K90 002 Cerebrovascular Accident K90 006 Haemorrhage; cerebral K90 017 Stoke
Peripheral Vascular Disease	K92 003 Disease;peripheral vascular K92 004 Gangrene K92 005 Ischaemia;contracture K92 006 Ischaemia;limb(gangrene) K92 017 Claudication;intermittent K92 021 Thromboangitis obliterans K92 022 Stenosis;artery K92 025 Arteriosclerosis
Carotid Stenosis	K52 008 Endarterectomy;intern carotid K53 007 Stent(s);carotid K53 010 Angioplasty;cerebral K91 011 Stenosis;arterial;precerebral K91 014 Stenosis;artery;carotid
Renal Artery Stenosis	U99 028 Stenosis;artery;renal

Mental Health	
Depression	P76 001 Depression P76 002 Depression; postnatal P76 010 Depression; reactive P76 016 Depression; endogenous P76 017 Melancholia P76 018 Anxiety with Depression
Anxiety	P01 002 Feeling; anxious P01 003 Anxiety P01 010 Feeling; tense P01 018 Tense P74 001 Anxious State P74 002 Feeling' anxious P74 004 Anxiety Neurosis P76 018 Anxiety with Depression P79 009 Phobia
Schizophrenia	P72 002 Schizophrenia; paranoid P72 011 Schizophrenia
Bipolar	P73 002 Depression;manic P73 004 Disorder;bipolar P73 007 Manic depressive P73 012 Psychosis;manic depressive
ADHD	P81 001 Hyperkinetic syndrome P81 003 Disorder;attent deficit(hyper)
Autism	P99 005 Autism P99 006 Autism;child P99 010 Aspergers syndrome
Dementia	P70 001 Disease;Alzheimers P70 003 Dementia P70 004 Alzheimers dementia P70 007 Psychosis;senile P05 003 Senility

Bone Disease	
Osteoporosis	L95 001 Osteoporosis L95 002 Osteopenia L95 003 Fracture; osteoporotic
Osteoarthritis	L84 001 Spondylosis L84 004 Osteoarthritis; spine L89 001 Osteoarthritis; hip L90 001 Osteoarthritis; knee L91 003 Osteoarthritis L92 007 Osteoarthritis; shoulder

Renal	
Renal Impairment	U28 001 Transplant;renal U59 001 Dialysis; kidney (renal) U59 008 Haemodialysis U85 001 Polycystic kidney U88 001 Nephropathy U88 003 Nephrotic syndrome U88 008 Glomerulonephritis;chronic U88 010 Nephropathy;analgesic U88 011 Nephropathy;diabetic U88 012 Nephrosclerosis U99 005 Failure; renal; acute U99 006 Necrosis;renal U99 016 Uraemia U99 022 Insufficiency;renal U99 023 Failure;renal;chronic U99 024 Necrosis;renal;papillary U99 025 Pyelonephritis;chronic U99 028 Stenosis;artery;renal U99 030 Failure;renal;NOS U99 031 Disease;renal U99 032 Impairment;renal U99 034 Disease;kidney;chronic U99 035 Disease;kidney;chronic;stage 1 U99 036 Disease;kidney;chronic;stage 2 U99 037 Disease;kidney;chronic;stage 3 U99 038 Disease;kidney;chronic;stage 4 U99 039 Disease;kidney;chronic;stage 5

Chronic Renal Failure	U28 001 Transplant;renal U59 001 Dialysis; kidney (renal) U59 008 Haemodialysis U85 001 Polycystic kidney U88 001 Nephropathy U88 003 Nephrotic syndrome U88 008 Glomerulonephritis;chronic U88 010 Nephropathy;analgesic U88 011 Nephropathy;diabetic U88 012 Nephrosclerosis U99 006 Necrosis;renal U99 016 Uraemia U99 022 Insufficiency;renal U99 023 Failure;renal;chronic U99 024 Necrosis;renal;papillary U99 025 Pyelonephritis;chronic U99 028 Stenosis;artery;renal U99 030 Failure;renal;NOS U99 031 Disease;renal U99 032 Impairment;renal U99 034 Disease;kidney;chronic U99 035 Disease;kidney;chronic;stage 1 U99 036 Disease;kidney;chronic;stage 2 U99 037 Disease;kidney;chronic;stage 3 U99 038 Disease;kidney;chronic;stage 4 U99 039 Disease;kidney;chronic;stage 5

Other	
Hyperlipidaemia	T93 001 Hypercholesterolaemia T93 006 High Cholesterol T93 008 Hyperlipidaemia T93 015 Dyslipidaemia
Chlamydia	X92 001 Chlamydia;F X92 002 Chlamydia;cervical

Drug Abuse	P18 001 Dependence;medicinal P18 002 Abuse;medicinal;dependent P18 003 Abuse;medicinal;non-depend P18 004 Withdrawal;drug;legal P18 005 Abuse;prescript drug;depend P18 006 Abuse;prescript drug;non-depen P18 007 Dependence;prescription drug P18 008 Drug seeking behaviour P19 001 Addiction;drug(s) P19 002 Dependence;drug(s) P19 003 Glue sniffing (habitual) P19 004 Psychosis;drug P19 005 Abuse;drug(s);dependent P19 006 Abuse;drug(s);non dependent P19 007 Abuse;drug(s);glue P19 008 Abuse;drug(s);other substance P19 009 Problem;drugs P19 010 Problem;substance related P19 011 Withdrawal;drug;illegal P19 012 Addiction;drug(s);heroin P19 013 Addiction;drug(s);amphetamine P19 014 Addiction;drug(s);ecstasy P19 015 Addiction;drug(s);marijuana P19 016 Addiction;drug(s);LSD P19 017 Addiction;drug(s);cocaine P19 018 Abuse;drug(s);heroin P19 019 Abuse;drug(s);amphetamine P19 020 Abuse;drug(s);ecstasy P19 021 Abuse;drug(s);marijuana P19 022 Abuse;drug(s);LSD P19 023 Abuse;drug(s);cocaine P19 024 Abuse;drug(s) P19 025 Withdrawal;drug P19 026 Overdose;drug;non medicinal P19 027 Abuse;kava P19 028 Abuse;solvent P19 029 Sniffing;petrol P19 030 Sniffing;paint P19 031 Intoxication;other substance

Pregnancy

Pregnancy is true if the patient has a clinical item recorded with system code of "PRE" and rule code of "PR-START" (normally Pregnancy Confirmed) recorded with no clinical item recorded with system code "PRE" and rule code of "PR-END" eg "Normal vaginal delivery". Click on the End Preganancy button on the Obstetrics tab on the clinical record screen for more examples.

Note: The Obstetrics tab will display "Pregnancy outcome not recorded" or "Pregnant (gestation unknown)" if the pregnancy gestation is >= 50 weeks or unknown, respectively. This status is not described in the export.

APPENDIX G-5 – MEDICATIONS

The data collection process collects medications that are found on the medication summary screen. It does not make any decisions about whether a medication should actually have been removed from the medication summary screen. The GP is responsible for making sure the list of medications is accurate.

Medication Group	Generic / Brand	Medication
ARB	G	Irbesartan 1638 Candesartan cilexetil 1739 Telmisartan 2336 Eprosartan mesylate 2559 Losartan potassium 3186 Olmesartan medoxomil 4258 Valsartan 4318
ACE Iinhibitors	G	Quinapril hydrochloride 107 Enalapril maleate 112 Captopril 114 Perindopril erbumine 117 Fosinopril sodium 122 Lisinopril dihydrate 125 Ramipril 126 Trandolapril 1227 Perindopril arginine 4220
Antidiabetics - Glitazones	G	Rosiglitazone maleate 2773 Pioglitazone hydrochloride 2831
Antidiabetics - Metformin	G	Metformin hydrochloride 453
Antidiabetics - Insulin	G	Glargine insulin 3799 glulisine insulin 4265 Insulin, aspart (rys) 2761 Insulin, aspart (rys) protamine suspension 4043 Insulin, detemir (rys) 4143 Insulin, glargine 3798 Insulin, glulisine 4264 Insulin, isophane (rbe) 3956 Insulin, isophane (rys) 4025 Insulin, isophane bovine 4340 Insulin, lispro (rbe) 1517 Insulin, lispro (rbe) protamine suspension 3910 Insulin, neutral (rbe) 3954 Insulin, neutral (rys) 4343 Insulin, neutral bovine 4339

		Isophane insulin (bovine) 4342 Isophane insulin (rys) 4026 Lispro insulin 1637 Neutral insulin (bovine) 4341
Antidiabetics - Oral	G	Acarbose 1543 Glibenclamide 452 Gliclazide 455 Glimepiride 2779 Glipizide 456 Glyburide 1313 Metformin hydrochloride 453 Pioglitazone hydrochloride 2831 Repaglinide 2556 Rosiglitazone maleate 2773
Antithrombotics - anticoagulants	G	Dabigatran etexilate 4387 Rivaroxaban 4390 Warfarin sodium 201
Antithrombotics - antiplatets	G	Aspirin 197 Clopidogrel bisulfate 4338 Clopidogrel hydrogen sulfate 3180 Dipridamole 204 Ticlopidine hydrochloride 205
Aspirin	G	Aspirin 197
Warfarin	G	Warfarin sodium 201
Clopidogrel	G	Clopidogrel bisulfate 4338 Clopidogrel hydrogen sulfate 3180
Dabigatran	G	Dabigatran etexilate 4387
Beta Blockers - Antihypertensives	G	Atenolol 135 Betaxolol hydrochloride 785 Bimatoprost 3245 Bisoprolol fumarate 3117 Carvedilol 1634 Dobutamine hydrochloride 179 Dorzolamide hydrochloride 1516 Esmolol hydrochloride 132 Isoprenaline hydrochloride 181 Isoproterenol hydrochloride 1322 Labetalol hydrochloride 124 Levarterenol acid tartrate 1353 Metoprolol succinate 2995 Metoprolol tartrate 130 Noradrenaline acid tartrate 182 Oxprenolol hydrochloride 133

		Pindolol 129 Prindolol 1367 Propranolol hydrochloride 134 Sotalol hydrochloride 153 Timolol maleate 131 Travoprost 3070
Beta Blockers – Chronic heart failure	G	Bisoprolol Fumarate 3117 Carvedilol 1634 Nebivolol 4484
	B	Toprol-XL 6956
Beta Blockers – Myocardial Infarction	G	Atenolol 135 Betaxolol Hydrochloride 785 Bisoprolol Fumarate 3117 Carvedilol 1634 Esmolol Hydrochloride 132 Labetalol Hydrochloride 124 Metoprolol 3968,2995,130 Nebivolol 4484 Oxprenolol Hydrochloride 133 Pindolol 129 Sotalol Hydrochloride 153
Calcium Antagonists	G	Amlodipine besylate 123 Diltiazem hydrochloride 115 Felodipine 109 Lercanidipine hydrochloride 2937 Nifedipine 108 Verapamil hydrochloride 113
Corticosteroids - Glucocorticoids	G	Beclomethasone dipropionate 714 Betamethasone acetate 396 Betamethasone dipropionate 875 Betamethasone sodium phosphate 397 Betamethasone valerate 874 Budesonide 717 Cortisol 1319 Cortisol acetate 1320 Cortisol sodium succinate 1321 Cortisone acetate 399 Dexamethasone 404 Dexamethasone sodium phosphate 400 Fluticasone furoate 4317 Fluticasone propionate 1230 Hydrocortisone 99 Hydrocortisone acetate 92

		Hydrocortisone sodium succinate 405 Methylprednisolone acetate 403 Methylprednisolone sodium succinate 408 Prednisolone 402 Prednisolone hexanoate 103 Prednisolone sodium phosphate 97 Prednisone 401 Triamcinolone acetonide 407
Diuretics	G	Acetazolamide 787 Amiloride hydrochloride 137 Bumetanide 141 Chlortalidone 4356 Chlorthalidone 148 Eplerenone 4147 Ethacrynic acid 145 Frusemide 147 Hydrochlorothiazide 138 Indapamide hemihydrate 1041 Spironolactone 136 Triamterene 144
Lipid M/fying - Statins	G	Atorvastatin calcium 1627 Fluvastatin sodium 1474 Pravastatin sodium 171 Rosuvastatin calcium 4236 Simvastatin 167
Lipid M/fying - Fibrates	G	Fenofibrate 4029 Gemfibrozil 168
Lipid M/fying - Other	G	Cholestyramine 172 Colestipol hydrochloride 166 Ezetimibe 3818 Nicotinic acid 170
Mental Health - Antipsychotics	G	Amisulpride 3113 Aripiprazole 3817 Chlorpromazine hydrochloride 259 Clozapine 260 Droperidol 261 Flupenthixol decanoate 1194 Flupentixol decanoate 4368 Fluphenazine decanoate 262 Haloperidol 270 Haloperidol decanoate 263 Olanzapine 1542 Paliperidone 4287

		Pericyazine 268 Prochlorperazine 322 Prochlorperazine maleate 320 Prochlorperazine mesylate 321 Quetiapine fumarate 2555 Quetiapine fumarate 2555 Risperidone 1196 Trifluoperazine hydrochloride 49 Zuclopenthixol acetate 1489 Zuclopenthixol decanoate 1521 Zuclopenthixol dihydrochloride 1559
Mental Health – Antipsychotics - Typical	G	Chlorpromazine hydrochloride 259 Droperidol 261 Flupenthixol decanoate 1194 Flupentixol decanoate 4368 Fluphenazine decanoate 262 Haloperidol 270 Haloperidol decanoate 263 Pericyazine 268 Prochlorperazine 322 Prochlorperazine maleate 320 Prochlorperazine mesylate 321 Trifluoperazine hydrochloride 49 Zuclopenthixol acetate 1489 Zuclopenthixol decanoate 1521 Zuclopenthixol dihydrochloride 1559
Mental Health – Antipsychotics - Atypical	G	Amisulpride 3113 Aripiprazole 3817 Clozapine 260 Olanzapine 1542 Paliperidone 4287 Quetiapine fumarate 2555 Risperidone 1196
Mental Health - Antidepressants	G	Amitriptyline hydrochloride 265 Citalopram hydrobromide 1630 Clomipramine hydrochloride 273 Desvenlafaxine 4388 Dosulepin hydrochloride 4364 Dothiepin hydrochloride 276 Doxepin hydrochloride 275 Duloxetine hydrochloride 4299 Escitalopram oxalate 3396 Fluoxetine hydrochloride 281

		Fluvoxamine maleate 1547 Imipramine hydrochloride 277 Mianserin hydrochloride 283 Mirtazapine 2825 Moclobemide 274 Nortriptyline hydrochloride 272 Paroxetine hydrochloride 1181 Paroxetine mesilate 3123 Phenelzine sulfate 278 Reboxetine mesylate 3071 Sertraline hydrochloride 1224 Tranylcypromine sulfate 279 Trimipramine 282 Venlafaxine hydrochloride 1504
Mental Health – Mood Stabiliser - Lithium	G	Lithium carbonate 264 Lithium chloride 3286
Mental Health – Anti-anxiety	G	Alprazolam 255 Bromazepam 253 Buspirone hydrochloride 250 Chlorpromazine hydrochloride 259 Clobazam 252 Diazepam 248 Dosulepin hydrochloride 4364 Dothiepin hydrochloride 276 Doxepin hydrochloride 275 Escitalopram oxalate 3396 Gentian 4429 Gentiana lutea root dry 4427 Hops 4428 Humulus lupulus fruit dry 4426 Lorazepam 249 Mianserin hydrochloride 283 Oxazepam 247 Paroxetine hydrochloride 1181 Paroxetine mesilate 3123 Passiflora incarnata herb dry 4217 Passionflower 4218 Pericyazine 268 Sertraline hydrochloride 1224 Trifluoperazine hydrochloride 49 Trimipramine 282 Valerian 3541 Valeriana officinalis root dry 2485

Mental Health - Stimulants	G	Atomoxetine hydrochloride 3962 Dexamphetamine sulfate 284 Methylphenidate hydrochloride 285
Respiratory – Asthma Relievers	B	Ventolin Obstetric Injection (Injection) 815 Ventolin (Syrup) 1281 Ventolin (Injection) 1281 Airomir Autohaler and Inhaler (Autohaler) 4009 Airomir Autohaler and Inhaler (Inhaler) 4009 Asmol CFC-free Inhaler (Inhaler) 4114 Asmol uni-dose (Nebulising Solution) 3363 Butamol (Nebuliser solution) 7147 Chemmart Salbutamol (Nebulising Solution) 6004 Combivent Metered Dose Aerosol (Inhaler) 4792 Epaq Inhaler (Inhaler) 5558 GenRx Salbutamol Inhalation Ampoule (Nebulising Solution) 6006 Pharmacor Salbutamol (Nebulising solution) 8000 Salbutamol Inhalation Solution (Nebulising Solution) 1295 Salbutamol Inhalation Solution (Nebulising Solution) 1295 Salbutamol Sandoz (Nebulising solution) 7999 Salbutamol-GA (Nebulising solution) 8001 Terry White Chemists Salbutamol (Nebulising Solution) 6008 Ventolin CFC-free Inhaler (Inhaler) 4115 Ventolin Respirator Solution and Nebules (Nebulising Solution) 1296 Ventolin Respirator Solution and Nebules (Nebulising Solution) 1296 Ventolin Rotacaps (Powder for Inhalation) 2982 Bricanyl Elixir and Injection (Elixir) 1266 Bricanyl Elixir and Injection (Injection) 1266 Bricanyl for Inhalation (Turbuhaler) 1288 Bricanyl for Inhalation (Nebulising Solution) 1288 Aeron (Nebuliser solution) 7315 APO-Ipratropium (Nebuliser solution) 8203 Apoven (Nebuliser Solution) 5559 Atrovent Metered Aerosol (CFC-free) (Metered aerosol) 6818 Atrovent Nebulising Solution (Inhalation Solution) 1284

		Atrovent Nebulising Solution (Unit Dose Vials) 1284 Chemmart Ipratropium (Nebuliser solution) 5440 Combivent Metered Dose Aerosol (Inhaler) 4792 GenRx Ipratropium (Nebuliser solution) 5442 Ipratrin uni-dose (Nebulising Solution) 3609 Ipravent Inhalation Solution (Multidose) (Nebuliser solution) 7114 Ipravent Inhalation Solution (Unit dose) (Inhalation solution) 5505 Terry White Chemists Ipratropium (Nebuliser solution) 5446 Atrovent Nasal, Atrovent Nasal Forte (Nasal Spray) 3369 Atrovent Nasal, Atrovent Nasal Forte (Nasal Spray) 3369
Respiratory – Asthma Symptom Controllers	B	Serevent (Inhaler) 2673 Serevent (Inhaler) 2673 Seretide (Powder for Inhalation) 5264 Seretide (Powder for Inhalation) 5264 Seretide (Powder for Inhalation) 5264 Seretide (Inhaler (CFC-free)) 5264 Seretide (Inhaler (CFC-free)) 5264 Seretide (Inhaler (CFC-free)) 5264 Foradile (Powder for inhalation) 3590 Oxis Turbuhaler (Turbuhaler) 3764
Respiratory – Asthma Preventers	B	Qvar (Inhaler) 5241 Qvar Autohaler Inhaler (Inhaler) 5241 Pulmicort (Turbuhaler) 1293 Alvesco 80 metered dose inhaler (Metered dose inhaler) 7317 Alvesco 160 metered dose inhaler (Metered dose inhaler) 7317 Flixotide Junior (CFC-Free) Inhaler (Metered Dose Inhaler (CFC-Free) 2948 Flixotide Inhaler (CFC-Free) (Metered Dose Inhaler (CFC-Free) 2948 Flixotide Junior Accuhaler Inhaler (Dry Powder Inhaler) 2948 Flixotide Accuhaler Inhaler (Dry Powder Inhaler) 2948 Flixotide Junior Inhaler (CFC containing) (Metered Dose Inhaler) 2948 Flixotide Nebules (Nebuliser solution) 4917 Intal (Nebulising Solution) 1289

		Intal CFC-Free Inhaler (Inhaler) 4736 Intal Forte CFC-Free Inhaler (Inhaler) 4736 Intal Spincaps Powder (Powder for Inhalation) 7422 Intal Spinhaler (Inhalation Device) 7422 Tilade CFC-Free (Inhaler) 4814 Singulair (Tablets) 3977 Accolate (Tablet) 4036
Respiratory – Asthma Combination	B	Seretide MDI (50/25) (Inhaler (CFC-free)) 5264 Seretide MDI (125/25) (Inhaler (CFC-free)) 5264 Seretide MDI (250/25) (Inhaler (CFC-free)) 5264 Seretide Accuhaler (100/50) (Powder for Inhalation) 5264 Seretide Accuhaler (250/50) (Powder for Inhalation) 5264 Seretide Accuhaler (500/50) (Powder for Inhalation) 5264 Symbicort Turbuhaler 100/6 (Powder for Inhalation) 6540 Symbicort Turbuhaler 200/6 (Powder for Inhalation) 6540 Symbicort Turbuhaler 400/12 (Powder for Inhalation) 6540
Respiratory – Steriod - Inhaled	G	Beclomethasone dipropionate 714 Budesonide 717 Ciclesonide 4125 Fluticasone propionate 1230
Respiratory – Steroid - Oral	B	Cortate (Tablets) 672 Panafcort, Panafcortelone (Tablets) 688 Predsone, Predsolone (Tablets) 7072 Sone (Tablets) 691
Respiratory - COPD	G	Tiotropium bromide 3390
Pain Relief - NSAIDS	G	Celecoxib 2333 Diclofenac diethylammonium 1226 Diclofenac potassium 356 Diclofenac sodium 348 Etoricoxib 3252 Ibuprofen 341 Ibuprofen lysine 4049 Indomethacin 226 Ketoprofen 352 Ketorolac trometamol 355 Mefenamic acid 350 Meloxicam 2841

		Naproxen 349 Naproxen sodium 351 Parecoxib sodium 3112 Piroxicam 347 Sulindac 344 Tiaprofenic acid 353
Pain Relief - COX2	G	Celecoxib 2333 Etoricoxib 3252 Meloxicam 2841 Parecoxib sodium 3112

APPENDIX G-6 – IMMUNISATIONS

Immunisations are collected if they have been entered in the clinical record as an Immunisation clinical item type and have a clinical item type description containing the immunisation name. The check for matching description is case insensitive.

CAT Immunisation	Communicare Mapping – Immunisation Name
Fluvax	FLUVAX FLUARIX FLUAD FLUVIRIN INFLUENZA INFLUVAC VAXIGRIP VAXIGRIP JUNIOR
Panvax	PANVAX
Gardasil	GARDASIL
Pertussis	ADACEL BOOSTRIX BOOSTRIX IPV DTP PERTUSSIS
Pneumovax	PNEUMOVAX 23 PNEUMOVAX
Hepatitis A	HEPATITIS A
Hepatitis B	ENGERIX B (PAEDIATRIC) HBVAX II (PAEDIATRIC) HEPATITIS B
DTPA	INFANRIX TRIPACEL TRIPLE ANTIGEN
HIB	ACTHIB HIBTITER HIBERIX PEDVAX HIB
Polio	IPOL ORAL POLIO
Prevenar	PREVENAR
Rotavirus	ROTATEQ ROTARIX
MMR	MMR PRIORIX
MENCCV	MENINGITEC MENJUGATE NEISVAC-C

VZV	VARILRIX VARIVAX REFRIGERATED

APPENDIX G-7 – ASSIGNED PROVIDERS

Each patient is assigned an Assigned Provider. This has no bearing on the activity status of the patient and is simply a means of trying to find the patient's regular doctor. The Enabled and Specialty properties of providers, and how often a patient has seen the provider are used to determine Assigned Providers. See File | Reference Tables | Providers to view Enabled and Speciality properties of providers.

There are four rules for determining an assigned provider. If no provider is found from the first rule, following rules are tried until a provider is found.

1) Active (enabled) provider, with speciality General Medical Practitioner, who has seen each patient the most number of times in the past 18 months.
2) Inactive (disabled) provider, with speciality General Medical Practitioner, who has seen each patient the most number of times in the past 18 months.
3) Active (enabled) provider, with speciality General Medical Practitioner, who has seen each patient most recently in the past 5 years.
4) Inactive (disabled) provider, with speciality General Medical Practitioner, who has seen each patient most recently in the past 5 years.

REFERENCE APPENDIX: COMMUNICARE CUSTOM FIELDS MAPPING

This Appendix explains how to map custom fields back to standard Communicare fields so they can be extracted by CAT. This process makes use of Communicare system codes. Some data items do not currently have system codes. These may be reviewed and added in a future release.

Mapping to System Codes

Example: We have a custom qualifier called *Waist Measurement* and we want to link it the standard Communicare qualifier called *Waist Circumference* so it will be collected by the CAT extractor. The system code mapping for waist listed in this document is **WCM**.

To link a custom qualifier to a standard Communicare qualifier follow the steps below.

Step 1: Locate the standard Communicare qualifier you want to link to and write down the value of the following fields: *System Code*, *Value Type* and *Units*

- The Qualifier Type Maintenance screen is accessed from the File > Reference Tables > Qualifier Types menu option (Figure 1) or by pressing Ctrl+Alt+Q shortcut key combination.

1.

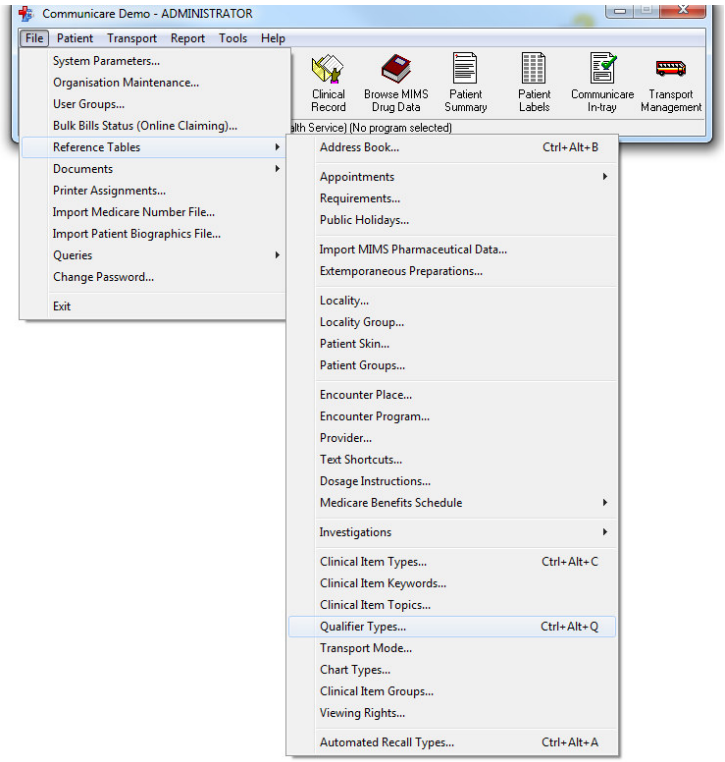


Figure 1: Qualifier Types option

- Locate *Waist Circumference* in the list by typing the first few letters

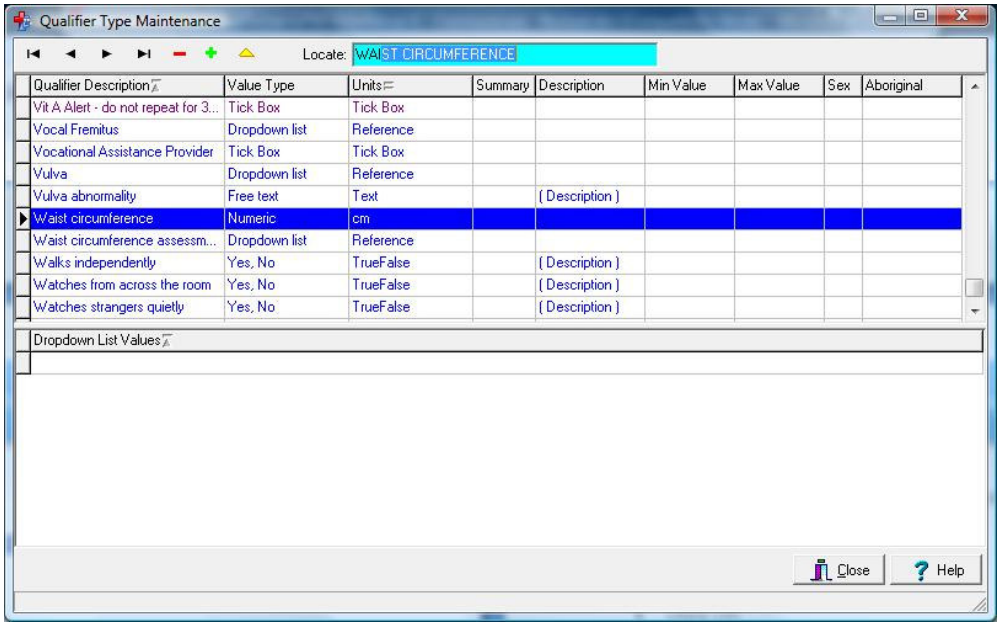


Figure 2: Qualifier Type Maintenance screen

- Right click in the screen to bring up the option 'Show Hidden Columns' (Figure 3) – click this option

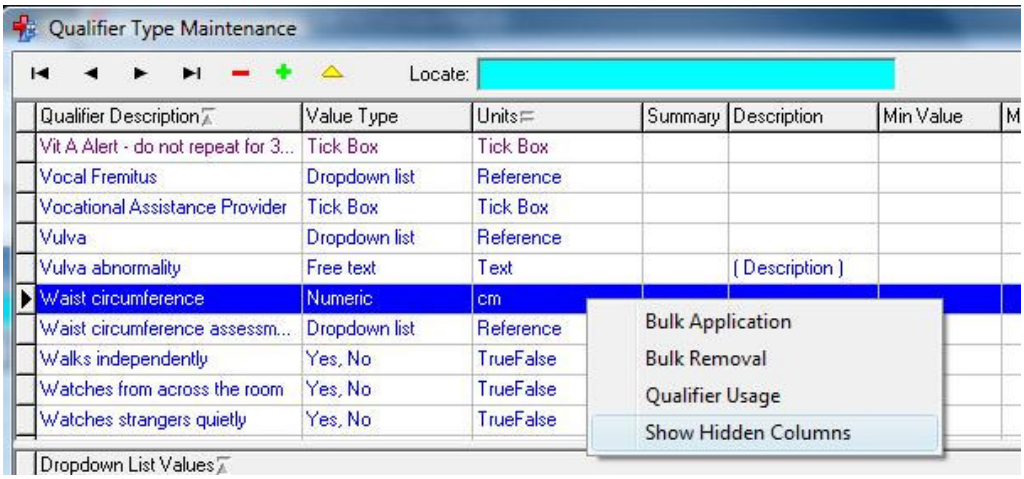
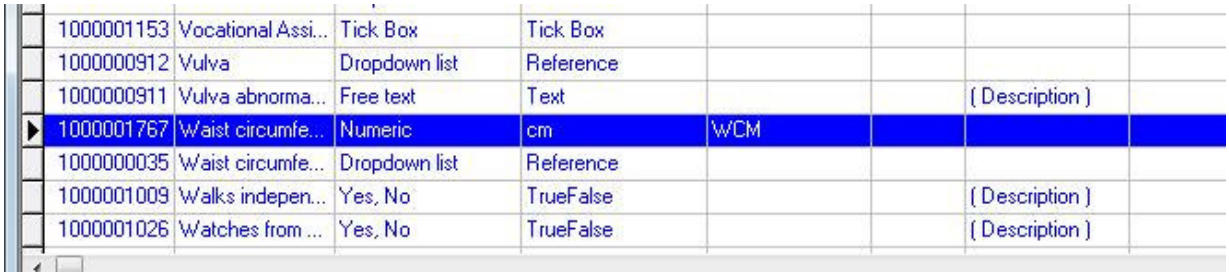


Figure 3: Show Hidden Columns option

- Write down the following values from the extended fields view (Figure 4)
  - *System Code*: WCM
  - *Value Type*: Numeric
  - *Units*: cm



1000001153	Vocational Assi...	Tick Box	Tick Box			
1000000912	Vulva	Dropdown list	Reference			
1000000911	Vulva abnorma...	Free text	Text			(Description)
1000001767	Waist circumfe...	Numeric	cm	WCM		
1000000035	Waist circumfe...	Dropdown list	Reference			
1000001009	Walks indepen...	Yes, No	TrueFalse			(Description)
1000001026	Watches from ...	Yes, No	TrueFalse			(Description)

Figure 4: Qualifier Type Maintenance screen with extended columns

Step 2: From the Qualifier Type Maintenance screen locate the custom qualifier you want to link eg. *Waist Measurement*. Use the tool bar to add or edit the qualifier.

- Add the appropriate System Code and ensure that the Value Type is the same (Figure 5). Using another value type may give you unpredictable results.

- Click Save

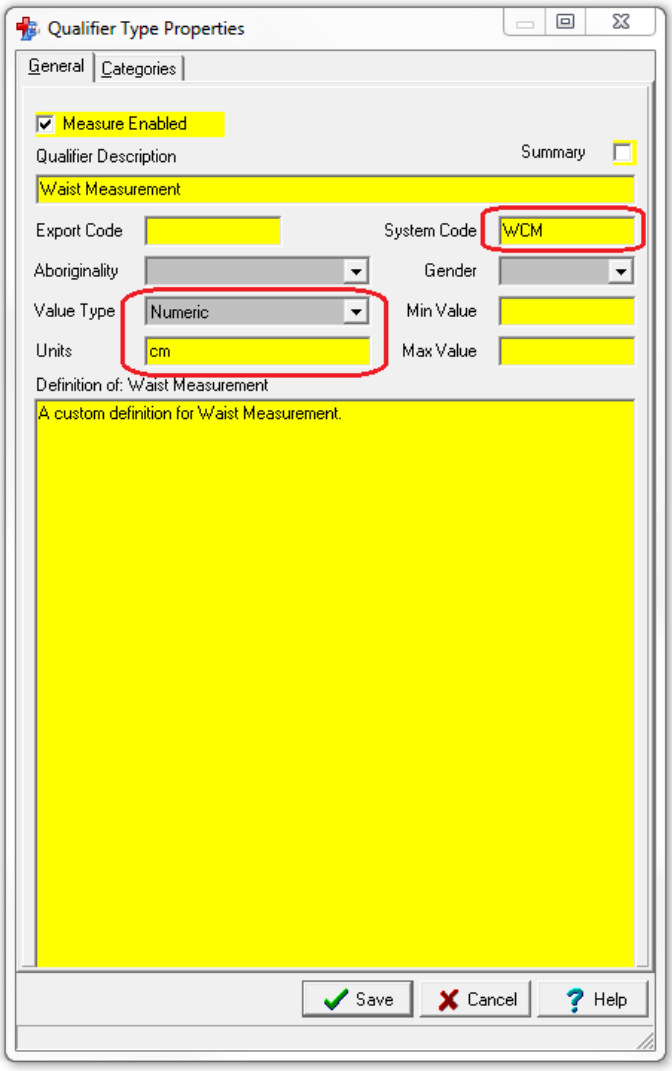


Figure 5: Edit a custom qualifier

Further Information:

The main functionalities of the Qualifier Type Maintenance window are described in the Communicare help file under System Administration | Reference Tables | Qualifier Types topic.